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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/587,867	06/06/2000	Scott Brunk	30278	8078

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EXAMINER

NGUYEN, LE V

ART UNIT	PAPER NUMBER
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2174

DATE MAILED: 04/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/587,867

Applicant(s)

BRUNK, SCOTT

Examiner

Le Nguyen

Art Unit

2174

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

1. The Specification is objected to because they include the following reference sign(s) not mentioned in the description: 820 of fig. 8 and the element it designates are not described in the written description. Correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 5-8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chisholm et al. ("Chisholm", US 5,883,817).

As per claims 1 and 2, Chisholm teaches a navigational device comprising:

a first input port for receiving a sensor signal from a sensor, the sensor signal being representative of a sensed condition (col. 4; lines 47-49; col. 6, lines 39-41);

a second input port for receiving a location signal, the location signal being representative of a location of the navigational device (col. 4, lines 9-11; col. 5, lines 27-29); and

a display screen including a first display area for displaying information corresponding to the sensed condition (fig. 6; col. 4, lines 47-50; col. 5, lines 54-61; col. 6, lines 30-43; col. 8,

lines 41-46; col. 7, lines 25-31; *information corresponding to a sensed condition, from sensors such as 110, is: a) recorded within the virtual model wherein the virtual model is updated to represent the orientation of a structure, and b) displayed in window 608*) and a second display area for displaying information corresponding to the location signal (602/604 of fig. 6; col. 6, lines 57-59).

Although Chisholm teaches a computing device coupled with the display screen wherein the screen is divided into several windows, each of which has its own boundaries and areas (fig. 6; *comprising of such areas as displayed at the top right/left hand areas of each of the plurality of windows*), Chisholm does not explicitly disclose the areas to be operable to permit a viewer to selectively adjust a size of the first and second display areas to change the relative portion of the display screen that is occupied by the first and second display areas to a number of different sizes. Official Notice is given that sizing/resizing windows are well known in the art. Therefore, it would have been obvious to an artisan at the time of the invention to include the sizing/resizing windows feature to Chisholm's teaching of windows and their boundaries and areas in order to allow users to customize an area of focus.

As per claim 5, Chisholm teaches a navigational device wherein the location signal includes a GPS signal (fig. 2; col. 5, lines 27-29).

As per claim 6, Chisholm teaches a navigational device wherein the information corresponding to the location signal including a GPS map (fig. 6; col. 7, lines 2-6; *GPS map 604*).

Claim 7 is similar in scope to claim 1 and is therefore rejected under similar rationale.

Claim 8 is similar in scope to claim 2 and is therefore rejected under similar rationale.

Claim 11 is similar in scope to claim 1 and is therefore rejected under similar rationale.

4. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chisholm et al. ("Chisholm", US 5,883,817) in view of Gudbjornsson (US 6,163,503).

As per claim 3, Chisholm teaches a navigational device with various sensors (col. 3, lines 40-50) the sensed condition including depth of a body of water (col. 4, lines 47-50; col. 5, lines 27-31; col. 6, lines 39-41). Chisholm does not explicitly teach the sensors to be of the form of sonic transducers. Gudbjornsson teaches a navigational device wherein the sensor includes a sonic transducer. Therefore, it would have been obvious to an artisan at the time of the invention to include Gudbjornsson's teaching of sonic transducers to Chisholm's teaching of sensors in order to provide users with an implementation preference.

Claim 9 is similar in scope to claim 3 and is therefore rejected under similar rationale.

5. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chisholm et al. ("Chisholm", US 5,883,817) in view of Gudbjornsson (US 6,163,503) and further in view of Robinson et al. ("Robinson", US 6,381,538).

As per claim 4, Chisholm teaches a device wherein a sensed condition includes depth of a body of water (col. 4, lines 47-50; col. 5, lines 27-31; col. 6, lines 39-41). Chisholm does not explicitly disclose the depth to be displayed. Robinson teaches a device wherein the sensed condition includes displaying the depth of a body of water (col. 16, lines 21-47). Therefore, it would have been obvious to an artisan at the time of the invention to include the teachings of Robinson's method of displaying such information as depth of a body of water to Chisholm's device comprising a sensed condition that includes depth of a body of water in order to provide users with additional visual information.

Claim 10 is similar in scope to claim 4 and is rejected under similar rationale with the exception of the enlarged depth display feature, which Robinson teaches (figs. 6-8; col. 13, lines 1-2).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lawrence et al. (US 6,333,488 B1) teach a method for setting and monitoring a water depth using an ultra-sonic transducer.

Wertsberger (US 5,303,204) teaches a submerged object warning and logging system.

Michaelson et al. (US 6,469,664 B1) teach a method, apparatus, and computer program products for alerting surface vessels to hazardous conditions.

Tendler (US 5,187,978) teaches a knotmeter impeller eliminator system.

Youngberg (US 5,119,341) teaches a method for extending GPS to underwater applications.

Tsuchiya et al. (US 5,267,042) teach an image pickup device for automatically recording the location where an image is recorded.

Paffenhotz et al. (US 6,021,092) teach a method for deriving surface consistent reflectivity map from dual sensor seismic data.

McLaren et al. (US 5,331,602) teach an acoustic navigation and diving information system and method.

Hubert (US 5,579,285) teaches a method and device for the monitoring and remote control of unmanned, mobile underwater vehicles.

Eninger (US 5,319,376) teaches an arctic submarine buoy and application methods.

Clark, Jr. et al. (US 5,699,244) teach a hand-held GUI PDA with GPS/DGPS receiver for collecting agronomic and GPS position data.

Koda et al. (US 6,520,102 B2) teach a remote control unmanned fishing boat and device for remote control thereof.

Nordin (US 5,615,114) teaches a method for mapping sea level undulations with applications to mineral and hydrocarbon prospecting.

Lynde (US 5,786,849) teaches a marine navigation.

Watts (US 5,343,395) teaches an aircraft landing guidance system and method.

Blanpain et al. (US 5,543,714) teach a three dimensional magnetic mapping process and apparatus with data filtering using an inverse computation.

Inquires

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lê Nguyen whose telephone number is **(703) 305-7601**. The examiner can normally be reached on Monday - Friday from 5:30 am to 2:00 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached on (703) 308-0640.

The fax numbers for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238 [After Final Communication]

(703) 746-7239 [Official Communication]

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(703) 746-7240 [For status inquiries, Draft Communication]

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Lê Nguyen
Patent Examiner
March 5, 2003

Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
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